## ROADS ANALYSIS For the BEAR CREEK WATERSHED ANALYSIS

Palisades Ranger District Bonneville County, Idaho

The following roads analysis was conducted to assess the existing road system and potential concerns for building new roads within the Bear Creek Watershed Analysis Area.

#### PAST CONDITION TRANSPORTATION

Very few roads existed in the Bear Creek Analysis Area in the 1920's. An improved road existed on the West side of the Snake River and crossed Bear Creek close to where it runs into the Snake River. The road continued to Calamity Point and then followed the river down stream to just past Long Gulch. This road was flooded from South of Calamity Point to Alpine, Wyoming, when the Palisades Dam was built in the mid 1950's and no road was constructed to take its place at that time. Later in approximately late 1950's and early 1960's a road was built from the dam around to Bear Creek and eventually constructed from Bear Creek to the McCoy Creek Road, this road is in place today. The only other roads in the analysis area were the old Skyline Road #143, down to Brockman Guard Station and a short segment of road on the upper end of South Fork of Bear Creek. The rest of the access in the area was trails.

#### CURRENT CONDITION TRANSPORTATION

Roads in the analysis area have not changed much since the 1920's. Roads that exist now are the Calamity to Bear Creek and Bear Creek/Elk Jensen to McCoy Creek #058 Road. This road is classified as a collector road as well as the Fall Creek-Skyline Road #077, a small portion of this road falls into the analysis area. The remainder of the roads are classified as local roads with some being two track roads with very limited access or 4x4 roads and others are high clearance roads. There is approximately 26 miles of road that exists in the analysis area. Much of the remainder of the area is accessible by a network of trails both motorized and non-motorized.

Two summer home areas are located in the analysis area and are serviced by roads that are maintained by the summer home association and are considered as private roads. There is a public boat dock and Calamity Campground, which is accessed by a good road system. Also the road from the Palisades Dam is an asphalt surface road to the Calamity

Guard Station and to the junction of the Calamity Boat Dock and Campground. The road splits at the junction and the other road is a good gravel surface road that goes to the summer home areas and then continues on to Bear Creek.

#### **ROADS ANALYSIS**

Roads analysis is an integrated ecological, social, and economic approach to transportation planning, which addresses both existing and potential future roads (USFS 1999). This roads analysis follows the process outlined in the document "Roads Analysis: Informing Decisions About Managing the National Forest Transportation System", (USFS 1999). This is not a NEPA document, but rather a site-specific analysis. This analysis defines the existing and desired conditions of the road system, and opportunities are identified to move towards the desired condition. This analysis provides a framework to identify road related concerns and management opportunities that can be incorporated into subsequent projects being evaluated through the NEPA process. If necessary, a Forest Plan amendment will be considered.

In October 2002, a Forest Roads Analysis was completed for the Targhee portion of the Forest in conjunction with the Final Environmental Impact Statement, Open Road and Open Motorized Trail Analysis. All motorized roads (Maintenance Level 1-5) on the Targhee National Forest were analyzed in the above documents.

#### Step 1. Setting up the Analysis

-Statement of the objectives of the analysis.

To analyze the present and projected road system needed in the Bear Creek Watershed Analysis Area

-List of interdisciplinary team members and participants.

Bud Alford, Wildlife Biologist and Team Leader, James Capurso, Fisheries Biologist, Randy Tepler, Soil Scientist, Michael Philbin, Hydrologist, Eugene McGregor, Fire Manager, Brent Porter, Forester and Recreation Manager, Greg Hanson, Range Manager, Rose Lehman, Botanist, Judy Warrick, Geographical Information Specialist and Leon Bleggi, Transportation Planner.

-List of information needs.

Various analytical tools from each IDT specialist, Forest resource database, and ArcView maps. Issues for this Analysis Area will drive the intensity of analysis.

-Plan for the analysis.

The questions from Step 4 of the Roads Analysis were addressed by the IDT.

### **Step 2. Describing the Situation**

-Map or other descriptions of the existing road and access system defined by the current forest plan or transportation plan.

Caribou-Targhee National Forest Travel Map, also an ArcView map has been produced showing the transportation network in the Analysis.

-Basic data needed to address roads analysis issues and questions. Each specialist has reviewed his or her resource specialty against the transportation map mentioned above for this Watershed Analysis Area.

Table 1 summarizes the existing condition of classified/unclassified roads within the analysis area.

Table 1 Existing Status and Condition of Roads

Road Name and Number	Length (miles)	Classified or Unclassified	Surface	Maintenance Level
Bear Creek-Elk Jensen 20058	10.3	С	4.6 Gravel 5.7 Native	3
Fall Creek- Skyline 20077	2.7	С	2.7 Native	2
Snake River Boat Club 20280	0.6	L	0.6 Native Private Road	3
West Fork Elk Creek 20863	4.0	L	4.0 Native	2
Bear Creek Trailhead 20247	0.8	L	0.8 Native	2
4 <sup>th</sup> of July Commissary 20017	1.8	L	1.8 Native	2
Old Sheep Driveway 20143	1.8	UC	1.8 Native/w earth barriers	1
No Name 20058a	0.5	UC	0.5 Native	1
Tissue Point 20910	0.2	L	0.2 Native	2
No Name Road 20017a	0.4	L	0.4 Native	1
No Name Road 20017b	0.8	L	0.8 Native	1

No Name Road	0.7	L	0.7 Native	1
20017c				
Palisades			1.0 Gravel	
Summer Home	1.0	L	Private	3
Area				

Open = Open to motorized traffic during summer months

Forest Plan Maintenance Level 1 – Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed one year. Basic custodial maintenance is performed to keep damage to adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate". Roads receiving Level 1 Maintenance may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open to traffic. However, while being maintained at Level 1, they are closed to vehicular traffic, but may be open and suitable for non-motorized uses (FSH 7709.58, Chapter 10).

**Forest Plan Maintenance Level 2** – Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Appropriate traffic management strategies are either to discourage or prohibit passenger cars, or; accept or discourage high clearance vehicles (FSH 7709.58, Chapter 10).

**Forest Plan Maintenance Level 3** – Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Appropriate traffic management strategies are either encourage or accept, or; discourage or prohibit certain classes of vehicles or users (FSH 7709.58, Chapter 10).

### Step 3. Identifying Issues

- -Summary of key road-related issues, including their origin and basis. The issues will be presented by general category (environmental, socio-cultural, and economic). *Issues were identified with forest specialists, line officers during the Targhee National Forest, "Roads Analysis Report". See Chapter 3, Identifying Issues.*
- -Description of the status of current data, including sources, availability, and methods of obtaining information.

The forest's resource database and various specialist databases are the most current information available for the Bear Creek Watershed Analysis Area.

#### Step 4, Assessing Benefits, Problems, and Risks.

- -A synthesis of the benefits, problems, and risks of the current road system. Each of the 71 questions were addressed in detail by the ID team and they are listed below in the document.
- -An assessment of the risks and benefits of entering any unroaded area. *Covered in the 71 questions, listed below.*
- -An assessment of the ability of the road system to meet objectives.

  Again, the 71 questions address in detail the ability of the road system to meet objectives.

### THE FOLLOWING ARE THE QUESTIONS THAT WERE ADRESSED BY THE ID TEAM AS PART OF STEP 4.

#### **Ecosystem Functions and Processes (EF)**

### EF (1) What ecological attributes, particularly those unique to the region, would be affected by roading of currently unroaded areas?

- 1. Roads in previously unroaded areas would likely accelerate access for a variety of Forest management activities, including timber harvest, and will change the amount, pattern, and composition of forest cover. This may lead to a change in terrestrial wildlife and ecological processes.
- 2. Roads in unroaded areas could contribute to the spread of invasive species.
- 3. Roads in previously unroaded areas would have an affect on big game especially in their wintering range and vulnerability to hunters.

# EF (2): To what degree do the presence, type, and location of roads increase the introduction and spread of exotic plant and animal species, insects, diseases, and parasites? What are the potential effects of such introductions to plant and animal species and ecosystem function in the area?

- 1. Roads serve as a corridor for the establishment and spread of noxious weeds.
- 2. There are no known exotic insect, diseases, or parasites in the area.
- 3. The potential effects of new introductions (weeds) is a reduction in quality forage for wild and domestic animals.

### EF (3): To what degree does the presence, type, and location of roads contribute to the control of insects, diseases, and parasites?

- 1. Roads contribute to the control of disease, insects and exotic plants to a high degree by providing administrative access to treat them.
- 2. Roads, other than Bear Creek-Elk Jensen and Skyline Road are in poor shape and offer limited opportunity to contribute to the control of disease, and insects; for example access to treat them.

#### EF (4): How does the road system affect ecological disturbance regimes in the area?

1. Roads can affect the rates of flow of various disturbance processes, especially fire. Fire frequency and severity can be affected by the fragmentation of the forest caused by roading by creating fuel breaks. Unroaded areas may be subject

- to fires of greater extent and severity, which in turn may influence the representation of plant communities in relation to their adaptation to fire
- 2. Ecological disturbances include fire, insects, weather, and disease. The road system does not affect these regimes except for improving fire suppression access, which is poor except along Bear Creek-Elk Jensen Road #058 and Fall Creek-Skyline Road #077.

### EF (5): What are the adverse effects of noise caused by developing, using, and maintaining roads?

- 1. Developing, using, and maintaining roads have the potential to produce noise that could disturb people camping and picnicking near the roads. In most cases, it is a short-term adverse effect.
- 2. Wildlife may be disturbed and displaced by noise from road development, frequent use, and maintenance.

#### Aquatic, Riparian Zone, and Water Quality (AQ)

### AQ (1): How and where does the road system modify the surface and subsurface hydrology of the area?

1. Compacted surfaces of roads and dispersed campsites along roads may decrease infiltration into the ground, increasing surface runoff, such as the Bear Creek Campground and the road going to the Bear Creek Trailhead #247.

### AQ (2): How and where does the road system generate surface erosion?

- 1. Most of the roads in the analysis area create erosion to some degree. Roads create the greatest amount of erosion of any management activity on the forest. Erosion reduces the productive nature of soils and introduces sediment into streams that are within the sediment delivery area.
- 2. This would include areas along road #058 Bear Creek-Elk Jensen and possibility on road #083 South Fork Bear Creek. Also any new roading may have some degree of erosion during and after construction.

#### AQ (3): How and where does the system affect mass wasting?

1. There is no known mass wasting in the area other than some small amounts along cut banks of some roads. Small landslides occur along the Bear Creek-Elk Jensen Road #058 sometimes during spring run off.

### AQ (4): How and where do road-stream crossings influence local stream channels and water quality?

1. There is only a few road-stream crossing in this analysis area and that would be on the Bear Creek-Elk Jensen Road #058 where it crosses Bear Creek. This

crossing is with a bridge and is not believed to be a major contributor of sediment in to Bear Creek, which would affect water quality. The road #863, West Fork Elk Creek, crosses the West Fork by means of a ford, and some sediment would be transmitted into the West Fork and then enter Bear Creek. This road however does not receive a lot of traffic and by late summer the West Fork is near dry or is dry. Most of the road-stream crossings, which are culvert crossings, are intermittent streams or draws which receive only spring runoff or to accommodate rainy seasons.

### AQ (5): How and where does the road system create potential for pollutants, such as chemical spills, oils, de-icing salts, or herbicides to enter surface waters?

1. The most potential for a spill would include the Bear Creek-Elk Jensen Road #058 to the Bear Creek Campground. There may be some isolated incidences where herbicides are used for control of noxious weeds.

AQ (6): How and where is the road system hydrologically connected to the stream system? How do the connections affect water quality and quantity (such as delivery of sediments, thermal increases, elevated peak flows)?

1. See AQ (2&4).

## AQ (7): What downstream beneficial uses of water exist in the area? What changes in uses and demand are expected over time? How are they affected or put at risk by road-derived pollutants?

1. Bear Creek flows into the Palisades Reservoir any derived pollutants from roads would have very little affect on the reservoir or any downstream activities.

#### AQ (8): How and where does the road system affect wetlands.

- 1. Roads in close proximity to ephemeral drainages and/or intermittent channels within the forest could eventually affect wetlands.
- 2. Compaction by roads crossing wetlands can restrict or block subsurface flows. Roads in this analysis that may have some impact would be the Bear Creek Trailhead Road #247 for about 0.5 mile, which runs parallel to Bear Creek.

## AQ (9): How does the road system alter physical channel dynamics, including isolation of flood plains; constraints on channel migration; and the movement of large wood, fine organic matter and sediment?

1. The road system affects these parameters when it encroaches upon the stream. This could only happen in the analysis area during a spring run off and through intermittent channels reaching a flood plain.

## AQ (10): How and where does the road system restrict the migration and movement of aquatic organisms? What aquatic species are affected and to what extent

1. For this analysis area no road related barriers have been identified.

### AQ (11): How does the road system affect shading, litterfall, and riparian plant communities?

1. Where the road encroaches upon the stream there are impacts upon riparian vegetation affecting shading and litterfall. The best example of this again would be the Bear Creek Trailhead Road #247.

### AQ (12): How and where does the road system contribute to fishing, poaching, or direct habitat loss for at-risk aquatic species?

- 1. The road system increases access that can provide opportunities for fishing and does avail the potential for poaching. Road locations can have a direct habitat loss to aquatic species when placed in a riparian zone.
- 2. Bear Creek-Elk Jensen Road #058 to Bear Creek, and access along the creek, including Bear Creek Trailhead Road #247, offers the most potential for risk of aquatic species.

### AQ (13): How and where does the road system facilitate the introduction of non-native aquatic species?

1. See AQ (12) above.

## AQ (14): To what extent does the road system overlap with areas of exceptionally high aquatic diversity or productivity, or areas containing rare or unique aquatic species or species of interest?

1. There are no areas of high aquatic diversity, productivity or areas containing rare or unique aquatic species or species of interest in the analysis area.

#### **Terrestrial Wildlife (TW)**

### TW (1): What are the direct effects of the road system on terrestrial species habitat?

- 1. Loss of habitat to road prism.
- 2. Loss of habitat due to displacement of animals by activities on roads.
- 3. Increased potential for man caused fire.
- 4. Acreage under the road displaced vegetative community that includes big game range and the presence of human activities could displace wildlife. Most roads in the area are narrow and use is sporadic, causing fragmentation of habitat for far

fewer species (those that perceive the opening as a barrier to movement). Riparian corridors are fragmented for some species by road crossings.

#### TW (2): How does the road system facilitate human activities that affect habitat?

1. The road system allows people to access the National Forest and to bring in their vehicles, horses, motorized trail vehicles, and opportunities for dispersed camping and logging. They also utilize dispersed campsites throughout the area. Impacts from these activities include trampling of vegetation, cutting of snags and removal of down woody debris. Increased human activities increase chances of man caused fire. Road access increases the chance of introduction of exotic species of plants and animals.

## TW (3): How does the road system affect legal and illegal human activities (including trapping, hunting, poaching, harassment, road kill, or illegal kill levels)? What are the effects on wildlife species?

- 1. Roads provide access for hunting, hunting camps, fishing and many other forest opportunities, and likewise provide a potential for poaching or other illegal activities. Roads provide winter snowmobile routes, which increase disturbance and displacement of animals such as furbearers and wintering moose.
- 2. Big game populations appear strong based on Fish and Game reports. The area is within Idaho Fish & Game a hunt unit that has seen an increase in elk hunting tags. Although deer populations have decreased in the last few years and season lengths may be shortened. Roads are not a contributing factor to the decline in big game numbers in the analysis are.

### TW (4): How does the road system directly affect unique communities of special features in the area?

- 1. The road system may temporarily displace big game species during summer months and fall migration due to human activities on the roads during the fall hunting season.
- 2. Winter use of roads by snowmobiles would have the most affect to unique communities because of access in big game winter areas. (See prescription 2.7a in the Revised Forest Plan).

#### **Economics (EC)**

## EC (1): How does the road system affect the agency's direct costs and revenues? What, if any, changes in the road system will increase net revenue to the agency by reducing cost, increasing revenue, or both?

1. The agency derives direct revenue from grazing, timber harvest, firewood permits, Christmas tree permits and special use permits......

- 2. The road system decreases cost of fire suppression by increasing access to remote areas or by not decommissioning roads.
- 3. The road system decreases cost to administer range allotments by providing ease of access.
- 4. Special Use permits that exist in the area are, Palisades Summer Home Area, Calamity Summer Home Area,

### EC (2): How does the road system affect priced and non-priced consequences included in economic efficiency analysis used to assess net benefits to society?

1. Economics is addressed in the FEIS of "Open Roads and Open Trail Analysis", (Motorized Road and Trail Travel Plan) Pages III-22,23. FEIS of 1997 Revised Forest Plan, Targhee National Forest, (Chapter III-79 and Chapter IV-53).

### EC (3): How does the road system affect the distribution of benefits and costs among affected people?

- 1. The road system is open and free to everyone (benefits). The cost of the system is borne through a combination of state and federal taxes. Many people who do not directly benefit from the road system, contribute to the cost of it.
- 2. Timber Sales have the potential to improve the roads in by graveling, improving drainage and maintenance to a road system.
- 3. See answer in EC(2) also.

#### **Timber management (TM)**

#### TM (1): How does road spacing and location affect logging system feasibility?

- 1. This analysis area does not fall in to a suitable timber base.
- 2. Timber harvest would be allowed with no clearcutting in Prescription 5.1.3b Urban Interface around the summer home areas.

### TM (2): How does the road system affect managing the suitable timber base and other lands?

 Road systems provide for faster and less expensive access to national forest lands for resources inventory data collection, monitoring activities and conditions, law enforcement, fire suppression, watershed restoration, site preparation and tree planting, treating noxious weeds, thinning operations, and numerous other forest management activities.

### TM (3): How does the road system affect access to timber stands needing silvicultural treatment?

1. See TM(1) and TM(2).

#### Minerals management (MM)

### MM (1): How does the road system affect access to locatable, leasable, and salable minerals?

- 1. The road system would not affect access to locatable, leasable and salable minerals.
- 2. The analysis area has a No Surface Occupancy Stipulation (NSO). See Oil and Gas Leasing EIS.

### Range management (RM)

### RM (1): How does the road system affect access to range allotments?

1. The roads in this analysis area allow for management of range allotments including transportation of livestock, herding, salt lick placements, and maintenance of range improvements on both sheep and cattle allotments.

#### Water production (WP)

## WP (1): How does the road system affect access, constructing, maintaining, monitoring, and operating water diversions, impoundments, and distribution canals or pipes?

1. The water developments in the area include developed springhead box for the Calamity and Palisades Summer Home water system and pipeline. Also a water system for Calamity Campground and Calamity Guard Station. The present road system and any improvements to the road system would have no affect on the water production in the area.

### WP (2): How does road development and use affect the water quality in municipal watersheds?

1. It is not expected that there would be any affect to any water system with the present road system.

#### WP (3): How does the road system affect access to hydroelectric power generation?

1. The hydroelectric power plants in the analysis area is at the Palisades Dam and the roads over the dam and around the dam site are under the care of the Department of Interior and is administered by the Bureau of Reclamation.

#### Special forest products (SP)

### SP (1): How does the road system affect access for collecting special forest products?

1. The collection of special forest products depends mainly on existing forest roads. This analysis area does not have many special forest products to be gathered other than firewood collecting, which have been used extensively near the roads.

#### **Special-Use Permits (SU)**

### SU (1): How does the road system affect managing special-use permit sites (concessionaires, communications sites, utility corridors, and so on)?

- 1. There are several special-use permits in the area mainly in the northeast portion of the watershed. There are special-use permits for Lower Valley Power to the Calamity and Palisades Summer Homes. Also, special-use permits for the summer home areas for Silver Star Communication. Both summer home areas have spring developments and pipelines on national forest land. The road system gives basic access for this use.
- 2. One communication site is located on Red Ridge but is only accessible by horseback or helicopter and the Forest Service operates it.

#### **General Public Transportation (GT)**

### GT (1): How does the road system connect to public roads and provide primary access to communities?

1. The road system in the analysis area all ties to a county or a state or forest road system. Each of the road systems lead to communities.

### GT (2): How does the road system connect large blocks of land in other ownership to public roads (ad hoc communities, subdivisions, in-holdings and so on)?

- 1. Land ownership patterns on the national forests are sometimes so intermixed that large blocks of private land or lands under other ownership are accessed by Forest Development Roads or by roads under cost-share agreements. A long-standing goal of planners has been to share a single road with other landowners wherever feasible rather than constructing parallel systems.
- 2. The Bear Creek-Elk Jensen road serves as a means of access to the summer home areas.

## GT (3) How does the road system affect managing roads with shared ownership or with limited jurisdiction? (RS 2477, cost-share, Prescriptive rights, FLPMA easements, FRTA easements, DOT easements).

1. There are no RS2477 roads in the analysis area.

2. The Bear Creek-Elk Jensen Road #058 from Calamity Junction to Bear Creek is a forest road under Bonneville County jurisdiction. The maintenance agreement between the Forest Service and the County has worked well.

#### GT (4): How does the road system address the safety of road users?

- 1. The objective of roads analysis in the Forest Service is to provide line officers with critical information to develop **road systems that are safe and responsive to public needs and desires**, are affordable and efficiently managed, have minimal negative ecological effects on the land, and are in balance with available funding for needed management actions.
- 2. The following roads may be difficult for a normal forest user to traverse:
  - (a) The West Fork Elk Creek #863 is an old oil exploration well road; it is narrow and not well maintained and is accessible only by high clearance vehicles. About a 1.5 miles from the intersection of road #058 the road crosses a culvert that is showing some signs of failure and should be replaced in the near future.
  - (b) Bear Creek-Elk Jensen #058 form Bear Creek over the top down to the McCoy Creek road is another high clearance vehicle road. When wet it is very slippery and hard to control vehicle maneuverability. This road is signed stating the route is open BUT recommended for high clearance vehicles only.
  - (c) 4<sup>th</sup> of July Commissary #017 road is also a road that is identified as a high clearance vehicle route.

#### Administrative uses (AU)

### AU (1): How does the road system affect access needed for research, inventory, and monitoring?

1. Road access affects research, inventories, and field monitoring. Limited or no road access increases time and costs for field observations. All of the roads in the analysis area are used in one form or another for administrative uses.

#### AU (2): How does the road system affect investigative or enforcement activities.

1. Forest Service law-enforcement agents are faced with a growing workload paralleling the growth in forest recreation users. This new workload adds to the traditional work related to natural resource theft of trespass. Expanded road access, particularly near towns, can add to problems with garbage dumping, vandalism and other criminal activities.

#### **Protection (PT)**

#### PT (1) How does the road system affect fuels management?

1. The road system does provide access for prescribed burns for decreasing fuels and access for wildfire. Also the roads provide an access for gathering firewood, which reduces fuel loading in areas with down and dead standing trees.

### PT (2) How does the road system affect the capacity of the Forest Service and cooperators to suppress wildfires?

 Good access is critical to fire fighters; the road system does provide access for fire suppression, thus facilitating fire suppression efforts. The analysis area has numerous roads near that need to be maintained on a regular basis to accommodate fire suppression if needed. Also some road improvements would help some of the roads in the analysis area if a need for fire equipment were to be used on the roads.

#### PT (3) How does the road system affect risk to firefighters and to public safety?

- 1. Increases chance of fire by increased accessibility.
- 2. The location of narrow roads in canyons can endanger fire fighters because of poor sight distance, dust, smoke, and non-fire fighting personal on the roads and an increase of traffic on the roads.
- 3. The major portion of the analysis area is does not have roads in it, but what roads exist could accommodate locations for a helicopter landings.

### PT (4) How does the road system contribute to airborne dust emissions resulting in reduced visibility and human health concerns?

PT (40) How does the road system contribute to airborne dust emissions resulting in reduced visibility and human health concerns?

- 1. Most of the roads in this analysis area are constructed with native material, which when dried out causes a fair amount of dust from vehicles using the road, and for a short period of time dust will remain in the air making visibility difficult.
- 2. In the analysis area there is limited dust abatement used on the roads.
- 3. With the low volume of traffic using these roads, it is felt that there is an extremely low risk to users, from dust emissions in the air.

#### **Unroaded Recreation (UR)**

### UR (1) Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities?

1. There is currently a dominance of roads in the analysis area. There will likely be a shortage of unroaded recreation opportunity in the future. It is suspected that this area will remain in about the same status as it is presently being managed.

## UR (2) is developing new roads into unroaded areas, decommissioning of existing roads, or changing the maintenance of existing roads causing substantial changes in the quantity, quality, or type of unroaded recreation opportunities?

- 1. There is a trend toward encroaching upon unroaded areas in this watershed analysis area with roads. The actions of this analysis would decrease the quality and quantity of unroaded recreation opportunities.
- 2. Some roads are proposed to be decommissioned in the Bear Creek Watershed Analysis. See FEIS, "Open Road and Open Motorized Trail Analysis" and Map 6C of that same packet.

## UR (3) What are the effects of noise and other disturbances caused by developing, using, and maintaining roads on the quantity, quality, and type of unroaded recreation opportunities?

1. Some minor disturbance would probably occur to those in the area when roadwork and equipment is being used but would have very little affect on unroaded recreations.

### UR (4) Who participates' in unroaded recreation in the area affected by construction, maintaining and decommissioning roads?

1. Hikers, equestrians, mountain bikers, hunters, motorcyclist etc. Those that participate in unroaded recreation would feel some affect.

### UR (5) What are these participants' attachments to the area, how strong is their feelings, and is alternative opportunities and locations available?

1. This depends upon the user group. For example, hikers may be after serenity and peace, the motorized recreation users want more opportunity to access remote areas, and locals would like to see it the way it use to be. Locals have a strong life long attachment to the area and the activities that they participate in. There are similar opportunities in other areas but they are not as close and convenient.

#### Road related recreation (RR)

### RR (1) Is there now or will there be in the future excess supply or excess demand for roaded recreation opportunities?

1. There are very few roads in the area now and it does not seem that there is a demand for more roaded recreation opportunities in the future.

RR (2) Is developing new roads into unroaded areas, decommissioning existing roads, or changing maintenance of existing roads causing significant changes in the quantity, quality, or type of roaded recreation opportunities?

1. In this analysis area, most is accessible by some form of motorized vehicle and it is felt that there would be no significant changes for unroaded or roaded recreation opportunities.

## RR (3) What are the adverse effects of noise and other disturbances caused by constructing, using, and maintaining roads on the quantity, quality, or type of roaded recreation opportunities?

1. There may be annoyance to some forest users or minor inconvenience because of added activities on the forest.

### RR (4) Who participates in roaded recreation in the areas affected by road constructing, maintaining, or decommissioning?

1. Hunters, mountain bikers, ATV users, motorized bikers, campers, and firewood gathers as well as other users.

### RR 5) What are these participants' attachments to the area, how strong is their feelings, and is alternative opportunities and locations available?

1. Users have a strong historical and traditional use of the area. Some users have a strong feeling towards keeping the area open for all uses and other users have a strong feeling towards closing off much of the area mainly to motorized uses. There are other areas that offer alternative opportunities but forest users prefer to stay in their areas comfort or areas they have used for many years.

#### Passive Use Value (PV)

## PV (1) Do areas planned for road entry, closure, or decommissioning have unique physical or biological characteristics, such as unique natural features and threatened or endangered species?

1. There are not unique physical features that exist near or close to the any roads planned for decommissioning in this watershed.

### PV (2) Do areas planned for road construction, closure, or decommissioning have unique cultural, traditional, symbolic, spiritual, or religious significance?

1. Forest consultation procedures and inter-government agreements with the tribes to guide future cooperative efforts will comply with the protocols set forth in the National Resource Book on American Indian and Alaska Native relations Working Draft 1995 or its successor. But for this analysis area there are no unique cultural sites known at this time.

## PV (3) What, if any, groups of people (ethnic groups, subcultures, and so on) hold cultural, symbolic, spiritual, sacred, traditional, for religious values for unroaded areas planned for road entry or road closure?

1. See PV (2), same comments.

### PV (4) Will road construction, closure, or decommissioning significantly affect passive use value?

1. Yes, to some extent it will affect passive use values no matter what is done. To change from the present condition it will have some affect to the land and to the forest users.

#### Social issues (SI)

### SI (1) What are people's perceived needs and values for roads? How does road management affect people's dependence on, need for, and desire for roads?

- 1. Roads in general for this area have a great value; for recreation, livestock management, which provides access to the forest by various users for whatever reason, etc.
- 2. Many local residents depend on the road system for commodity use such as firewood gathering, hunting of big game animals to supplement family food supplies, livestock management operations, and providing some saw timber to industry and for personal use.
- 3. People don't give much thought to roads until their access is restricted. They need the roads in order to pursue their recreational activities, which makes them dependant upon roads and fosters the desire to keep them.

### SI (2) What are people's perceived needs and values for access? How does road management affect people's dependence on, need for, and desire for access?

1. Access is the permission or ability to enter an area or reach a destination. The road and trail system in the analysis area provides access to the entire area for all users.

### SI (3) How does the road system affect access to paleontological, archaeological, and historical sites?

1. There are no known sites in the analysis area.

## SI (4) How does the road system affect cultural and traditional uses (such as plant gathering, and access to traditional and cultural sites) and American Indian treaty rights.

1. The present road system does not affect cultural and traditional uses. Also See PV (2).

### SI (5) How are roads that are historic sites affected by road management?

1. None of the roads in the analysis have been claimed as a RS 2477 and none of them are claimed to be historic sites.

### SI (6) How is community social and economic health affected by road management (for example, lifestyles, businesses, tourism industry, infrastructure maintenance)

1. Current access needs to be maintained for community and economic health. Tourism in this area is primarily hunting and recreational and visitation along forest roads.

## SI (7) What is the perceived social and economic dependency of a community on an unroaded area versus the value of that un-roaded area for its intrinsic existence and symbolic values?

- 1. See first part of SI (6).
- 2. The road system is used by all groups of people. Changes in road management including closing, decommissioning or improving of roads in the area would have some effect on user groups.
- 3. Unroaded areas within national forests have a variety of societal values. Some people value natural resources existing in unroaded areas for the economic contribution afforded by their extraction such as timber, minerals, and roaded access. Other people value roadless areas for the contributions they provide in an undeveloped state such as increased solitude, quiet, and refugia for plants and animals.
- 4. This area has a lot of land that is unroaded but does have a motorized trail system that goes through it, and its value is not planned to be changed in the near future.

## SI (8) How does road management affect wilderness attributes, including natural integrity, natural appearance, opportunities for solitude, and opportunities for primitive recreation?

1. N/A for this analysis area when considering wilderness but there is an opportunity for primitive recreation and it will remain the same as it is managed now.

### SI (9) What are the traditional uses of animal and plants species within the area of analysis?

- 1. Animals big game, grouse, etc have been traditionally used as food.
- 2. Plants livestock have traditionally grazed the analysis area. Big game, small game and other animals have traditionally utilized the plants in the area.

3. Tree species in the area are used by wildlife. Local residents have used trees as saw timber, firewood and other products.

#### SI (10) How does road management affect people's sense of place?

- 1. Some people have been using this analysis area for decades and consider it a special place. These people are ranchers, outfitters, hunters and private forest users.
- 2. Many users see the area as their back yard. Changes in road management can affect access to special places or change the biophysical setting, affecting what people value.

#### **Civil Rights and Environmental Justice (CR)**

How does the road system, or its management, affect certain groups of people (minority, ethnic, cultural, racial, disabled, and low-income groups)?

- 1. The road system provides an opportunity for these groups to have easy access onto public lands. It provides an opportunity for people to supplement their food and fuel bills. The roads and trails in the analysis area provide a variety of access for these visitors.
- 2. People are affected by changes in road management and the access afforded by roads. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations, orders Federal agencies to identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low income populations..." Department of Agriculture agencies are required, per the Secretary of Agriculture's 1978 decision, to identify and address the civil rights implications of proposed agency actions in their management decisions.

#### **Step 5. Describing opportunities and Setting Priorities**

- -Descriptive ranking of the problems and risks posed by the current road system.
- -Assessment of the potential problems and opportunities of building roads in currently unroaded area.
- -List of opportunities, by priority, for addressing important problems and risks.
- 1) The road system, although relatively stable, suffers from a lack of routine maintenance on all roads. Many of the roads are rutted, lacking drainage structures and a gravel surface material. Numerous roads which are serving as ATV trails need to be re-located or improved.
- 2) Decommission previous identified roads found in the FEIS "Open Road and Open Motorized Trail Analysis".

- 3) Describing Opportunities and Priorities in the Targhee National Forest Roads Analysis.
- 4) Areas with the highest erosion potential are usually found at stream crossings. The most common problem at a crossing is the potential for steam diversions. Since most stream crossings will eventually fail, it is imperative to eliminate diversion potential at all existing crossings, a principle component of any erosion prevention plan within the watershed.
- 5) The road system, although relatively stable, suffers from a lack of routine maintenance on some roads. Many of the spur and feeder roads are rutted, with steep grades, and difficult to access without a 4x4 vehicle. Although the potential of a stream crossing failing is always a factor, it does not appear that there was any immediate threat of a failure on any of the road system that was surveyed for this watershed analysis.

-A prioritized list of specific actions, problems, or forest plan adjustments requiring NEPA analysis.

#### **OPPORTUNITIES BY PRIORITIES**

Fall Creek-Skyline Road #077, from Skyline to Brockman needs to be improved by excavating areas where rock outcrops exist on the road and replace with a good sub-base course, improve drainage and grade where needed then gravel road with a minimum of a 6 inches, and a width of 14 foot running surface.

#077 from Brockman to McCoy Creek Road needs to be bladed, drainage improved where needed and a sub-base course placed on it and then a minimum of 6 inches of gravel, with a running surface of 14 feet.

Road #058 Bear Creek-Elk Jensen, from Calamity to Bear Creek is maintained by Bonneville County.

Road #058 Bear Creek-Elk Jensen, from Bear Creek to Salt River-McCoy Road #087, needs to be improved by widening road prism, constructing turnouts, adding drainage structures to correct yearly sluffing of road surface also embankment. A sub-base needs to be laid down with a minimum of 6 inches of gravel surfacing to a width of not less than 14 feet.

Bear Creek Trailhead #247, this road will need to be upgraded, bladed smooth and graveled. The trailhead will be enlarged to accommodate the increase of backcountry users, horse, hikers and motorized, not recommended for ATV use.

West Fork of Elk Creek #863 is a road that gets most of its use during the fall of the year due to big game hunting. This road needs to be maintained and drainage problems corrected like the culvert that crosses the stream on the upper reaches of the road. According to fisheries this culvert will not allow fish passage and is adding road-related

sedimentation to the stream. Future proposal is to manage this road as it is presently being managed.

#017, 4<sup>th</sup> of July Commissary road is to be maintained as presently being managed with no improvements planned in the future.

Tissue Point Road #910 is a short road that provides access to some dispersed campsites near the lake and restrooms. It needs to bladed and graveled to make access more convenient to users.

#083 South Fork of Bear Creek is a native surface road that accesses an undeveloped trailhead. This road may receive some upgrading if the Brockman Timber Sale is approved, if not, the road will remain as is with general maintenance.

#159 Lombard Corral, is a fork off the South Fork of Bear Creek road and the conditions are the same as South Fork of Bear Creek.

-Table 2 identifies roads that would be directly affected by the Bear Creek watershed and summarizes the need and activity associated with each road.

**Table 2 Project Related Need/Activity** 

Road	Need for the Road Relative to	Road Activity Relative to
Number	Bear Creek Watershed Project	<b>Bear Creek Watershed Project</b>
077	Main Road from Fall Creek to Caribou Basin	Specified Road Maintenance
058	Main Road from Calamity to Bear Creek	County, Specified Road Maintenance
058	Main Road from Bear Creek to McCoy Creek	Specified Road Maintenance
247	Main access to Bear Creek Trailhead	Specified Road Maintenance
017	Access for livestock men and forest users	Specified Road Maintenance
910	Access to recreation sits and Forest Service Facilities	Specified Road Maintenance
863	Access well site and used by forest users	Specified Road Maintenance
083	Access Trailhead South Fork of Bear Cr.	Specified Road Maintenance
159	Access dispersed campsites, and used by livestock	Specified Road Maintenance
	permittees.	

Table 3 identifies the road related recommendations for all roads affected by the Twin Creek Timber sale.

**Table 3 Road-related Recommendations** 

Road	Recommended Actions	Cost
Number		Estimate
77	Perform maintenance as necessary, excavate rocky areas of road, enhance drainage, place	\$3.1 MM
	gravel surface on road its full length.	
058	Re-shape to provide adequate drainage, apply sub-grade and gravel surface, install culvert	1.2 MM
	where needed and widen road width.	
247	Reshape to provide adequate drainage, apply gravel surface.	\$10,100
017	General maintenance and correct drainage problems.	\$2,430
910	Reshape to provide adequate drainage, spot gravel where needed, improve campsites.	\$21,420

863	General maintenance, improve road crossing, correct drainage problems and replace CMP.	\$7,650
083 and 159	General maintenance and correct drainage problems.	\$5,740

### Step 6. Reporting

- -Reports including maps, analysis, and text documentation of the roads analysis. See the project folder documentation for the Roads Analysis for this Analysis Area.
- -Maps that show the data and information used in the analysis, and the opportunities identified during the analysis.

See the project folder documentation for the Roads Analysis for this Analysis Area.